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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,250	11/19/2003	Martin Evans	CAT/008	7738

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PATTERSON & SHERIDAN L.L.P.  
595 SHREWSBURY AVE, STE 100  
FIRST FLOOR  
SHREWSBURY, NJ 07702

EXAMINER

NECKEL, ALEXA DOROSHENK

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

10/717,250

Applicant(s)

EVANS, MARTIN

Examiner

Alexa D. Neckel

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 15, 17, 18, 21 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 11-14, 16, 19, 20, 22 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 20061025.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Haugen (2,616,591).

With respect to claim 1, Haugen discloses a dispensing device comprising:

a hopper vessel (see figure 5) with a partition (18) to define at least two compartments (12, 13);

a plenum (17) within the vessel fluidly connected to each compartment (see figure 5); and

a plurality of dispensing mechanisms (19, 26, 27, 30), each coupled to a compartment (12, 13).

With respect to claim 2, it can be seen in figure (5) that the partition (18) extends from a bottom of the vessel to an elevation short of the top of the vessel.

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With respect to claim 3, the partition (18) must be planar as the cross-sectional view shows only a line.

With respect to claim 7, it reasonably appears in figures 1 and 5 that the compartments (12, 13) are substantially equal in volume.

3. Claims 1, 2, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Pozo (4,809,883).

With respect to claims 1 and 2, Pozo discloses a dispensing assembly comprising:

a vessel (10) with a plurality of compartments (24, 28) separated by the compartment walls which extend from a bottom of the vessel to an elevation short of the top of the vessel (10) at plate (14) (see figure 2);

a plenum (15) associated with the inner compartments (24) and a plenum (13) associated with the outer compartments (28); and

a plurality of dispense mechanisms/funnels (42) associated with each compartment (24, 28) (see figure 2).

With respect to claim 7, it can be seen in figures 1-3 that the compartments (24, 28) are of substantially similar volumes.

With respect to claim 9, it can be seen in figure 2 that there are a plurality of fill ports (in dashed lines) disposed at the top of the vessel (10) and proximate to the plenums (15, 13).

4. Claims 10, 15, 17, 18, 21, and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Evans (2004/0166032)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to claim 10, Evans discloses an apparatus comprising a FCC unit (424) and a catalyst injection system (502) having a plurality of catalyst storage chambers (440, 510).

With respect to claim 15, it can be seen in figure 5 that the compartments (440, 510) are substantially the same volume.

With respect to claim 17, Evans further discloses wherein the vessel is controlled to a pressure of at least about 10 psi to about 100 psi (see claims 14 and 15).

With respect to claim 18, Evans further discloses a metering device (520) coupled to each compartment (440, 510).

With respect to claims 21 and 23-25, Evans discloses a method for injecting catalyst into a FCC unit comprising:

storing catalyst in a first (440) and second (510) compartments of a vessel (502); dispensing catalyst from the first compartment into an FCC unit (424); and dispensing catalyst from the second compartment to the FCC unit such that catalyst can be provided sequentially or blended/simultaneously (paragraph [0037]).

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haugen (2,616,591).

With respect to claim 6, though Haugen does not contemplate the vessels being of different sizes, it has been held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

With respect to claim 8, it would have been obvious to make the catalyst compartments of the modified device of Haugen adjustable in order accommodate for varying proportions of different catalysts required for an FCC reactor. It has been held that adjustability, where needed, is not a patentable advance. *In re Stevens*, 212 F.2d 197, 101 USPQ 284 (CCPA 1954).

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haugen (2,616,591) as applied to claims 1 and 2 above, and further in view of Marks (4,782,427) or Komeya et al. (4,660,881).

With respect to claims 4 and 5, in making the compartments adjustable, as discussed with claim 8 above, it would have been obvious to provide known means by

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which to adjust the partitions to accommodate varying sizes, such as flanges rotatable around a joint. Such partition adjusting means are known as evidenced by Marks (col. 3, lines 56-67) and Komeya et al. (col. 9, lines 12-23).

### ***Allowable Subject Matter***

8. Claims 11-14, 19, 20, 22, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: While the prior art discloses the FCC arrangement of claim 10 and method of injecting catalyst into a FCC unit of claim 21, it fails to teach or suggest having a separator coupled to the bottom of the vessel and extending to an elevation short of a top of the vessel (claim 11) or having a hole proximate the top of the vessel (claim 19); the prior art also fails to teach the compartments having different (claim 14) or adjustable (claims 20 and 22) volumes; and the prior art also fails to teach a plenum positioned proximate fill ports at the top of the vessel and fluidly coupled to the compartments (claim 16).

### ***Response to Arguments***

#### **Drawings**

The objections to the drawings is withdrawn due to applicant's amendments to the figures and specification.

Specification

The objections to the specification are withdrawn due to applicant's amendments to the specification.

35 USC 103(a)

Applicant has successfully disqualified the Evans (2004/0166032) reference as prior art available for use under a 35 USC 103(a) rejection. It is noted that the statement of common inventor and common assignation at the time of the invention does not preclude this reference from being available as prior art under 35 USC 102(e), as applied above.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa D. Neckel whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.




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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexa D. Neckel  
Primary Examiner  
Art Unit 1764

October 26, 2006

  
ALEXA DOROSHENK NECKEL  
PRIMARY EXAMINER